

Hurricane Wilma Summary Report

311 and miamidade.gov
Customer Service Response



1. Overview

On Thursday, October 20th, the Miami-Dade County Emergency Operations Center (EOC) activated to level two status in anticipation of Hurricane Wilma, the 21st named storm of the 2005 Atlantic hurricane season, and the first storm ever to use the 'W' name since alphabetical naming began in 1950.

At its peak, Hurricane Wilma was the most intense hurricane ever recorded in the Atlantic basin. By the time it crossed Miami-Dade County, sustained winds were clocked in the Category 2 range. Still, it left 957,000 homes in Miami-Dade County without electricity, inflicted a large swath of damage, and generated more than 140,000 hurricane-related calls to Miami-Dade's 311 Answer Center during the 13 days of EOC activation.



The following is a customer service response report of the activities and results of the County's two primary customer service channels -- the 311 Answer Center and miamidade.gov -- in response to Wilma for the period between October 20th and November 1st.

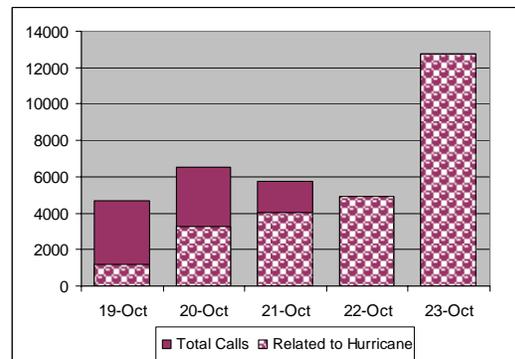
2. 311

Miami-Dade's 311 Answer Center serves as a single point of contact for all non-emergency public services, including information and service requests. The technology solution behind 311 is highly sophisticated, integrating the entire customer service process into a single system.

311 has proven to be particularly critical during hurricane activations by providing citizens easy access to government information. It also serves to divert calls from 911 emergency systems, enabling 911 to remain available for truly life-threatening situations. People have an innate urge to connect with each other, and in situations of impending threat, this urge is more than communal, it is the will to survive.

Pre-Storm Activity and Inquiries. The strength of Hurricane Wilma was ominous: for the three days that Wilma hovered over the Yucatán Peninsula, 311 responded to more than 17,200 calls, 75% of which were hurricane-related inquiries. By Sunday, as Wilma finally departed Cancun and began a rapid acceleration toward Florida, 311 was handling 591 calls per hour, or roughly 150 calls per 311 specialist per shift. The table below *shows the acceleration of hurricane-related calls as the storm approached, from the day before activation until the day before arrival:*

	Total Calls	Hurricane Calls	Percent
Wed	4690	1172	25%
Thurs	6514	3257	60%
Fri	5762	4033	70%
Sat	4911	4911	100%
Sun	12,737	12,737	100%



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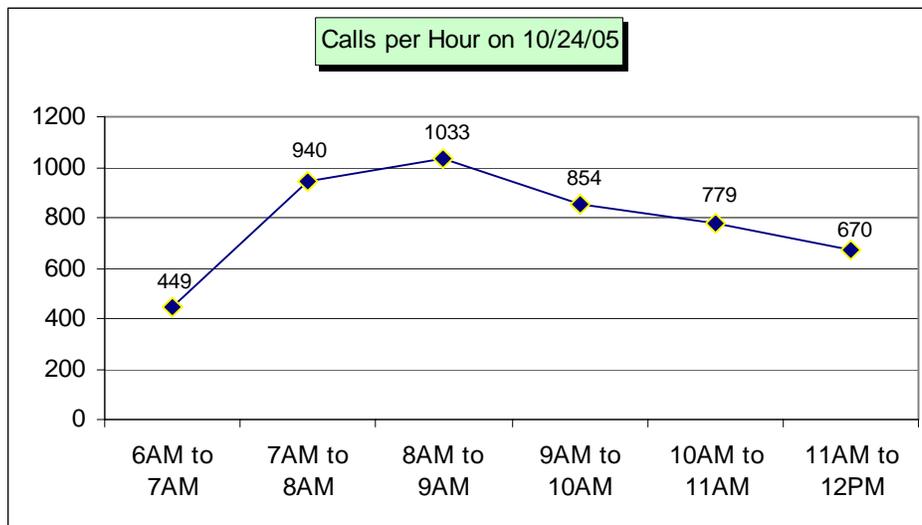
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The slow arrival of Wilma prompted uncertainty about many issues -- school and government closures, the status of evacuations – but also gave residents more time to plan and take action with respect to storm preparations. These issues are reflected in the overall profile of pre-storm requests. Major topics included:

- Public, private and higher education school closures (3442)
- Government office closures (923 including courts)
- Evacuations and evacuation routes (1197)
- Shelter openings and locations (1195)
- General questions about getting ready for the storm -- supplies needed and steps to take to secure your home (1042)
- Survival tips if you plan to stay at home (43)
- Availability and distribution of sand for sandbags to prevent or curtail potential flood water damage (984)

Wilma Arrives. Wilma made landfall at 6:30 a.m. on October 24th, just north of Everglades City, packing Category 3 sustained winds of 125 miles per hour. Because of the size of the storm, the effects of the hurricane were already being felt in Miami-Dade County. At this point, 311 received over 400 calls in the 6-7AM hour. Most callers had abandoned the option of choosing between English, Spanish and Creole – pressing “1” the English language option to expedite speaking with a live person. Call-takers went from being information specialists to “friends in need” providing reassurance to thousands of residents during the worst hours of the storm, along with information on where the storm was at and when it would pass.



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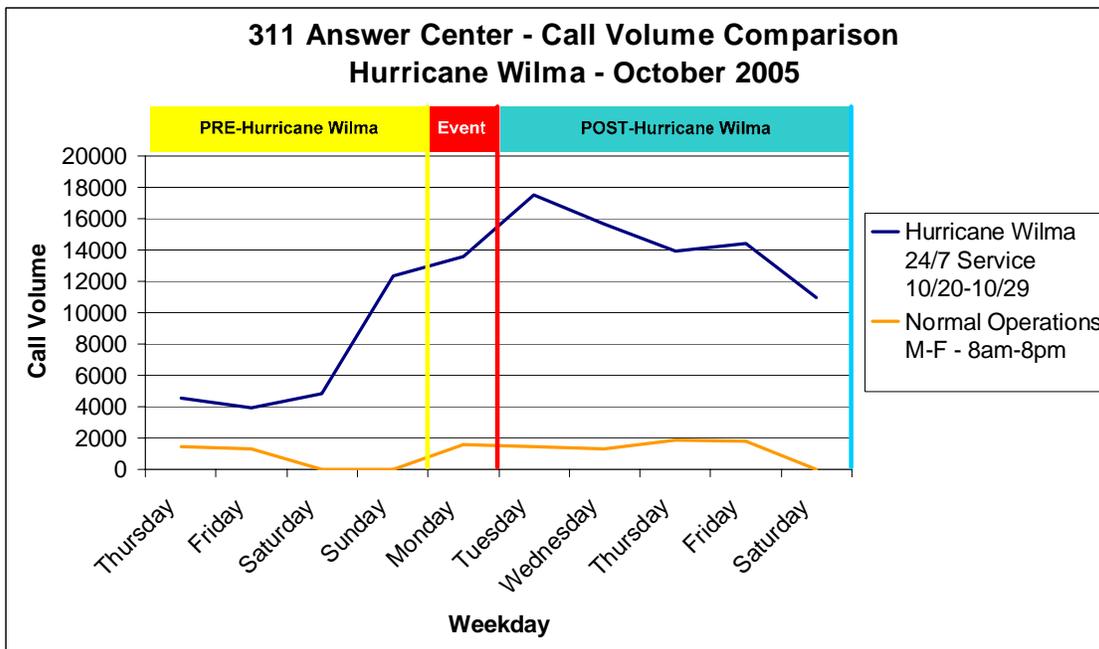
Post-Storm Inquiries. Moving into a period of damage assessment and recovery, the types of calls received changed:

- Reports of loss of electricity/ downed lines (9018)
- Distribution of water, food, ice (7571)
- Curfews (11001)
- Locations of opened gasoline stations (2772)
- Status of closures - schools, government offices, transit systems, bridges (14,058)
- Blue Roof program (2594)
- FEMA-related (4609)



Call volume assessment

In total, over 150,000 calls were handled by 311 during the Hurricane Wilma activation. The table below compares the volume of calls taken during the activation period with the volume of calls handled in a typical two week period. Calls to the 311 Answer Center peaked the day after the storm, a 1200% increase over average daily call volume! (Although not displayed, it is interesting to note that even after the activation was lifted, the overall daily volume of calls has sustained itself at levels higher than those prior to Wilma.)



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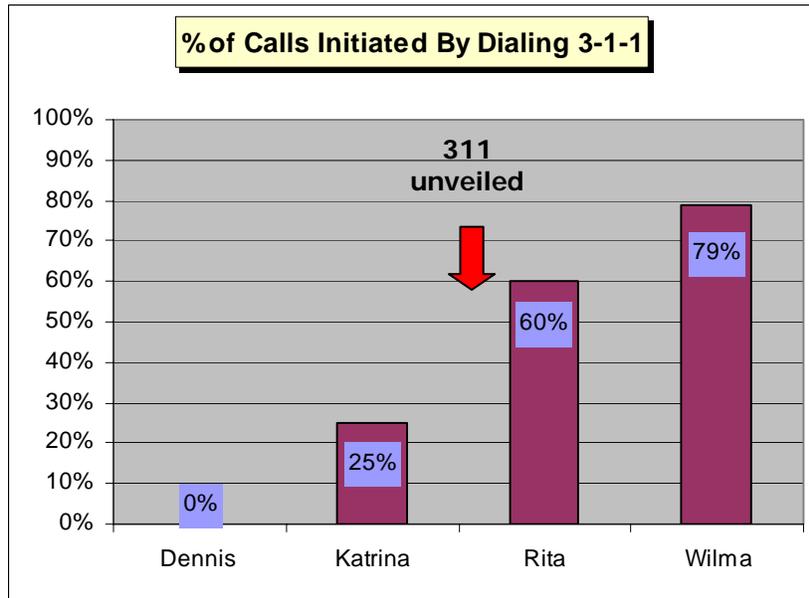
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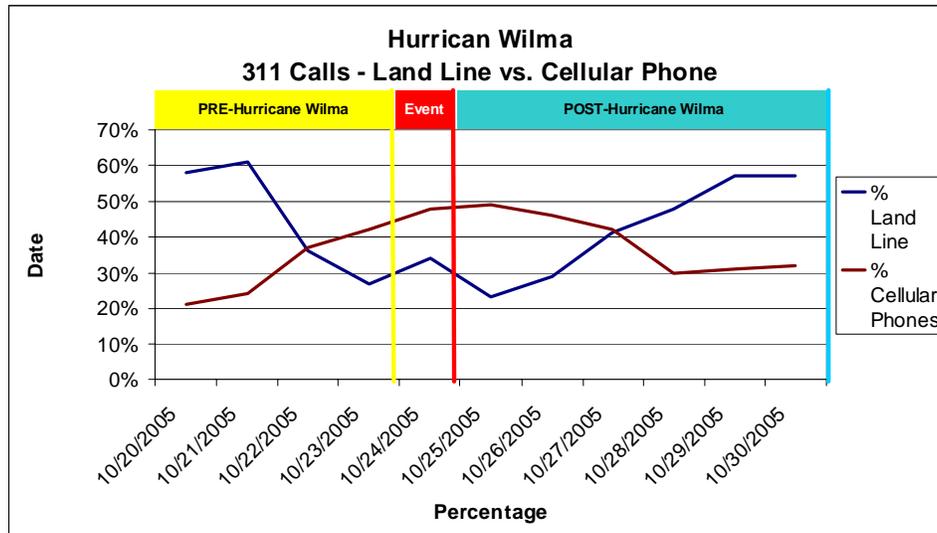


The overwhelming majority of calls for information and service were placed by someone dialing the 3-1-1 number (79%), as opposed to the rumor control hotline 468-5900. The rapid adoption of the 311 number during the 2005 hurricane season is displayed below.

- During Hurricane Katrina, 25% of the calls received at the Answer Center were initiated from a 311 dial.
- This percentage jumped to 60% after the public unveiling of the 311 educational campaign on September 16th, 2005, just two days before the activation for Rita.
- For Hurricane Wilma, 4 out of 5 calls were initiated from a 311 dial, rendering the former hotline number nearly obsolete (except for out-of-county calls).



Land Line vs. Cellular Use. Interestingly, of those calls initiated by dialing 311, 37% came from cellular devices. The use of cell phones to access 311 ranged between 20 and 50 percent of all 311 calls. An analysis of these calls clearly shows that calls to 311 from cellular phones spiked during the hours preceding, during and following the passage of the storm through our county.



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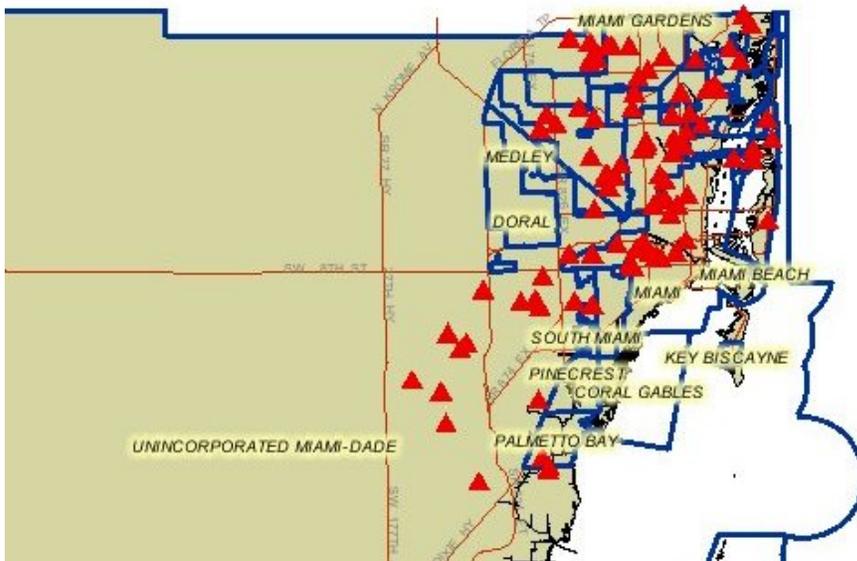
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Mapping Capabilities. The 311 technology has the ability to map all the service requests that were taken during the activation period. Currently, the system is configured to take service requests for:

- Traffic Lights Out
- Flooding Complaints
- Bellsouth Line Down/Phone Outage
- City of Miami Garbage Pile
- Fallen Tree
- FPL (Power Line Down/Power Outage)
- Tree/Vegetation Blocking Roadway or Sidewalk
- Mobile Home Damage
- Roof Damage
- Structural Damage

As an example, the map below illustrates citizen reports of roof damage – information that was captured during the activation period. Although the extent of roof damage is clearly more widespread (in the tens of thousands across multiple Florida counties), the ability to record early citizen notification about damage can be used to assist the County as well as other agencies (FEMA, Army Corp of Engineer's 'Operation Blue Roof' program) in determining where to allocate resources. As 311's reporting system – known as 'ServiceStat' -- enters its next phase, generation of this type of data will be web-enabled and available to decision-makers and elected officials online.

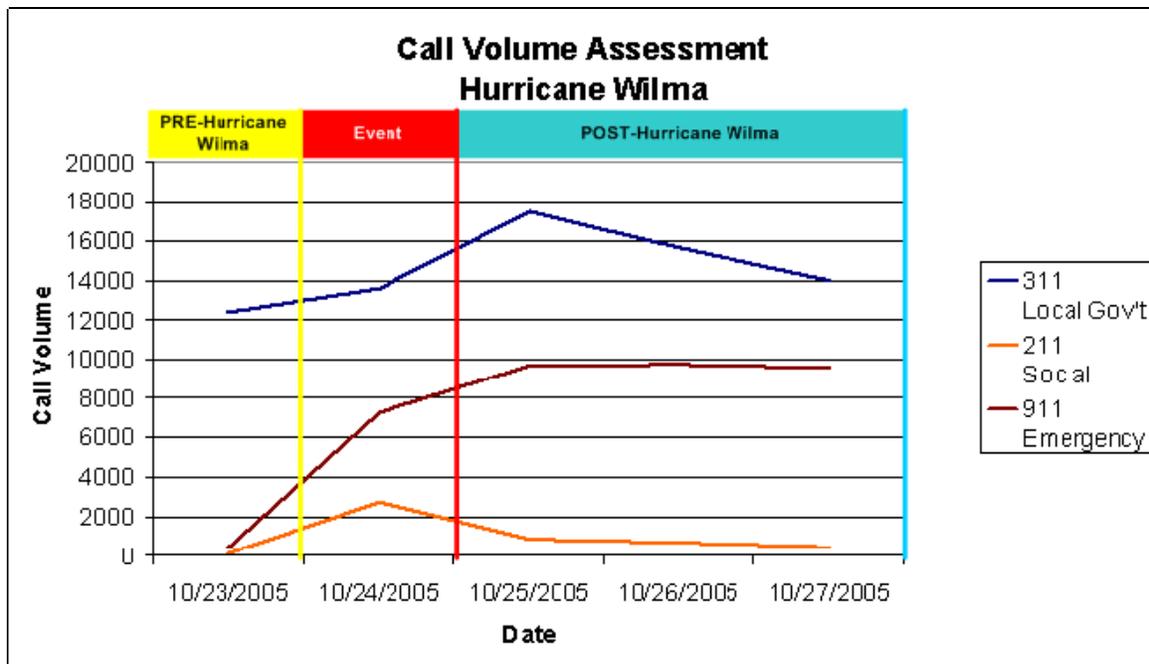


Utilizing an Emergency Communication Safety Net.

Call centers serve as a pivotal link in Miami-Dade County to provide an end-to-end network of emergency communication, information, response and post-activation care. 911, 311, and 211 work in partnership to meet a broad composite of needs: emergency, social service and local government response.

911 was established to provide rapid direct access to public safety agencies, 311 to provide access to non-emergency and other governmental services, and 211 to provide coordination for information and referral for health and human services. In Miami-Dade, the County's Office of Emergency Management routinely provides a couple of stations to 211 during activations. In the case of Wilma, the number of workstations provided for 211 staff was expanded to eight when the organization's own facility lost power.

As shown in the table below, all N-1-1 numbers were active participants in the Hurricane Wilma event. It is evident that 311 averaged a significantly higher call volume before, during and after the event than either 911 or 211. Interestingly, 211 calls peaked before the event, whereas 911 and 311 calls peaked shortly after the event. It should be noted that within the State of Florida, 211 does not have the capability to receive wireless calls at this time.



Working with Public and Private Partners. Miami-Dade County is home to more than 2.3 million residents, comprising an unincorporated area of more than 1 million people and 35 municipalities. In addition to providing general information services for municipal residents during the Wilma activation, 311 is able to segregate citizen service requests regarding specific jurisdictional services (i.e., trees blocking the roadway, downed signage, etc.) by using address validation and GIS technology. Legislative support would potentially enable further development of this multi-jurisdictional service, and the development of a "mutual aid" program between 311 centers in neighboring counties.

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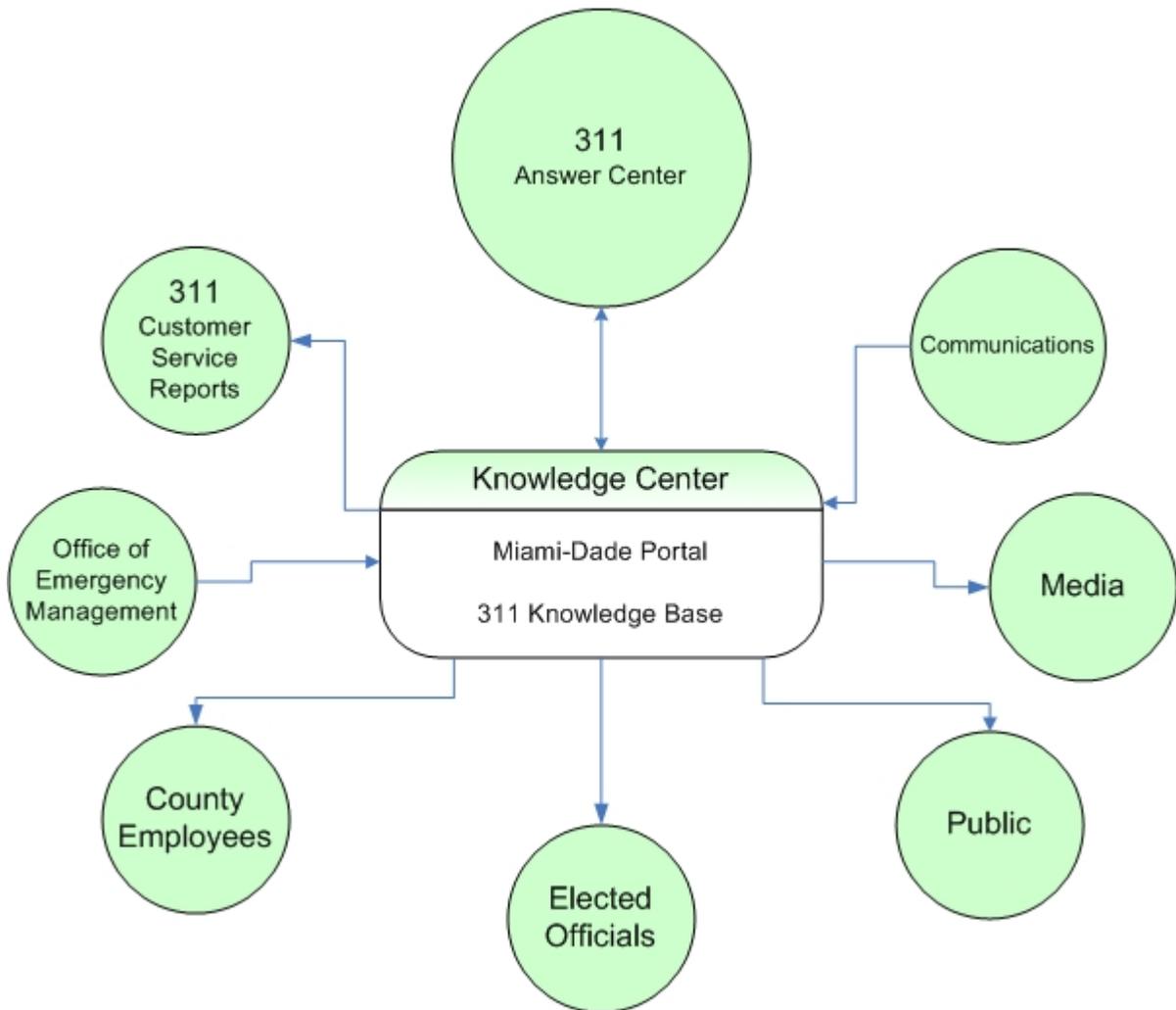


Given the accessible nature of 311, the operation has the ability to provide information and data to other important partners in the community such as the public school board and local utilities. As noted earlier in the report these entities comprise a large percentage of the service requests received and information provided through 311.

3. MIAMIDADE.GOV

The portal and 311 served as the conduit of information and service for a variety of stakeholders, including the public, employees, the media, and those involved in emergency management.

In fact, the 311 Call Specialists relied heavily on information posted on the County's web portal in order to provide accurate information in the most expeditious way during the activation period. Online Services staff was activated to provide 24/7 web portal support to EOC operations. Serving as the Answer Center liaison, Online Services staff coordinated directly with the 311 Answer Center team, providing immediate access to the latest status on County operations.



4. CONCLUSION

The 2005 hurricane season was the first year in which Miami-Dade's 311 has been in place. This report illustrates actual benefits 311 offers to emergency planning and response. Hurricanes are nothing new to Miami-Dade County or the State of Florida, and as part of our emergency activation, a phone bank has always been in place.

The question then is how has 311 made a difference?

Improved accessibility to information and service – Simplified access to government information and service is achieved through use of the 311 number. While many residents, during the normal course of their lives, may have an infrequent need to contact their local government, this need is likely to heighten in response to hurricane situations. As illustrated in this report, access to 311 from cellular phones is significant, at times as high as 50%. It is reasonable to assume that a person calling from a cellular phone does not have ready and easy access to a phone book. Thus, the ability to call a single, easy to remember number facilitates their ability to make contact with government at the time it is needed most, as well as providing a simple conduit for reporting problems in the wake of a storm.

Timely access to accurate information and services – The volume and nature of calls to 311 shifts dramatically as a hurricane approaches, strikes and departs the community. The technology and process supporting 311 enables the County to provide timely and accurate information, as well as support a high call volume. This technology allows us to monitor the most frequently requested information, real time, such that event announcements can be updated, enabling 311 to respond in many cases without the intervention of a Call Specialist.

Ability to scale the operation to meet increased demand, and additional services – The simplified access of 311, combined with the heightened need for information during an activation, serves to expand the scope of service provided by the 311 Call Center. Supported by a highly extensible infrastructure, call statistics are monitored around the clock and staffing levels can be adjusted to meet demand. An analysis of the types of calls handled during Hurricane Wilma illustrates that 311 serves to assist not only with County specific information, but inquiries regarding schools, power and other governmental agencies. Partnering with other entities that are key to emergency operations forms the basis for a Communication Safety Net serving a diverse set of community needs, and greatly expands our capability to respond.

Real time assessment of community needs – Information regarding each call placed to 311 is captured thus providing the ability for real time assessment of community needs. On the spot decision making related to all phases of emergency management based on the need for service is enabled through an assessment of 311 data. Moreover, a retrospective analysis of this information is invaluable as a tool for continuous improvement of emergency plans. This capability can be greatly expanded in the future.

Quality customer service – Particularly during times of community stress, the need to reassure and calm the public is ever present. One of the most significant benefits of 311 during Hurricane Wilma is one that was not measured as a statistic: the compassion and commitment of the 311 Call Specialists who served the public thousands of times each day. Not merely answering the phone, these highly qualified and trained specialists emerged as heroes to many in the community who were in desperate need of assistance. The evolution of 311 throughout hurricane season 2005 is evidence that a well managed call center operation already serving as a gateway to local government can be readily and effectively mobilized to support an emergency activation.

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